

ABSTRACT OF THE INVENTION

A recording head to simultaneously read or write data to and from a plurality of tracks on magnetic tape, while compensating for shrinkage or expansion caused by moisture, temperature, creep caused by tension in the tape, creep caused by dimensional instability of the tape, as well as other causes. A recording head in accordance with the invention includes a leading module and a trailing module. In order to accommodate fluctuation in tape dimensions due to expansion or shrinkage, the leading and trailing modules may be offset with respect to one another. By offsetting one module with respect to the other, selected read and write elements from one module may more closely align with certain tracks of an expanded or shrunk tape, while other read and write elements from the other module may more closely align with other tracks on the tape.